

Plaintiffs' Exhibit 45

From: Drew Bradstock <dbradstock@google.com>
To: Jonathan Bellack <jbellack@google.com>, Bryan Rowley <browley@google.com>, Jan Seht <sehrt@google.com>, Cyrille Berliat <cberliat@google.com>, Alex Shellhammer <ashellhammer@google.com>
Sent: Tue, 21 Jul 2015 22:26:02 -0400
Subject: Re: Technorati Releases Tech To Manage Multiple Header Bidding Partners
Cc: Assaf Grabinsky <assafg@google.com>, Michelle Sarlo Dauwalter <michellesarlo@google.com>, Chris LaSala <chrisl@google.com>, gerald miller <geraldmiller@google.com>, David Goodman <davidgoodman@google.com>, Dev Gogate <dgogate@google.com>, Jerome Grateau <jgrateau@google.com>, Scott Spencer <scottspencer@google.com>, Aparna Pappu <apappu@google.com>, Max Loubser <maxl@google.com>

Hi Everyone,

A group of us had an early session on external messaging on this (on copy). I'll pull in assaf and michelle on our discussions. There was an article today from appnexus on this too.

<http://blog.appnexus.com/2015/flatten-your-waterfall-with-pre-bid-integrations-to-scale-programmatic-revenue/>

I can work with Max to get a joint opt/yield mgmt view of how to handle this.

We do not want to fully embrace header bidding as we are giving away a cheap form of dynamic allocation for free to all our competitors. This would have a large distorting effect on our rate card as one of the largest advantages to AdX is real time competition. In many regions, especially EMEA, we have given away dfp at huge discounts to get access to inventory via DA. To address Assaf's question we dont have common key value data but Max and I worked with Max lin to examine how frequently demand sources were being booked as reservations.

March'15			
Mediation Party	Premium pubs	Mediation line item at reservation band	Mediation line item at remnant band
Network: Amazon		256	73
Trading desk: Xaxis		135	18
Remarketer: Criteo		274	96
Exchange: Rubicon		236	165
Exchange: Pubmatic		120	96
July'15			
Mediation Party	Premium pubs (n = 2408)	Mediation line item at reservation band	Mediation line item at remnant band
Network: Amazon	25	129	164
Trading desk: Xaxis	12	18	40
Remarketer: Criteo	34	209	92
	41	74	271

Exchange: Rubicon			
			450
Exchange: Pubmatic	11	30	

Regards,
Drew

On 21 July 2015 at 20:09, Jonathan Bellack <jbellack@google.com> wrote:

Also instead of a new meeting, how about we bring this to an upcoming DRX PRD+strategy meeting. Drew and Max can you ringlead?

On Tuesday, July 21, 2015, Jonathan Bellack <jbellack@google.com> wrote:

We definitely should not be endorsing header bidding. We believe it is not good for users.

Max L can share status on FLD, Drew is looking at other actions to help pubs measure the impact of header tags.

A meeting sounds good/fine. Do we have data in what pubs are doing this and what kind of results they are seeing? With their header partners, and/or the impact to Google from the implementation (rev/match rate drops, etc).

On Tuesday, July 21, 2015, Assaf Grabinsky <assafg@google.com> wrote:

This will affect a small % of impressions that are the most valuable in the auction as those will get sold before EDA.

In EMEA we are getting partner questions on this topic almost daily now. For now we maintain a reactive position saying that header bidder works very well with dynamic allocation as long as the line items are set as price priority and with the actual rates. We hear that buyers are demanding their header bidder LIs be trafficked as standard with high delivery goals to dodge EDA.

Given the surge in interest it seems we need a clear story for our sales teams: are we ignoring this for now due to ramping up of FLD and EDA in sponsorship, or rather should we go with a public stance embracing header bidders as rate setting signals for DFP that are fully compatible with Dynamic Allocation?

I also think we need to audit how often header bidders are actually implemented. Other than using page crawler logs which may take a while, does Eng have a script to identify the common KVs publishers are targeting in DFP?

On Tue, Jul 21, 2015 at 11:29 PM, Michelle Sarlo Dauwalter <michellesarlo@google.com> wrote:

Team, are you amenable to having a working session on header bidding soon? This is posing a threat to not only our programmatic auction business but also DFP/ Programmatic Guaranteed.

----- Forwarded message -----

From: "Lindsay Huggins Leykin" <lhug@google.com>

Date: Jul 21, 2015 6:17 PM

Subject: Technorati Releases Tech To Manage Multiple Header Bidding Partners

To: "Revenue-Solutions-AM" <revenue-solutions-am@google.com>

Cc:

FYI -

Seems like this is too new to have any feedback from our pubs, but it's an interesting development in Header Bidding...

Technorati Releases Tech To Manage Multiple Header Bidding Partners

Technorati on Monday released SmartWrapper, a SaaS-based product that helps publishers run multiple header bidding partners by bringing all demand partners into one place.

For publishers juggling multiple partners, SmartWrapper helps manage implementation page latency and gives publishers more unified analytics.

With the product release, Technorati enters a different market. "We see this continuing down the path of moving away from the network model and into SaaS," Technorati CEO Shani Higgins said.

Technorati runs a network business serving mid-tail to long-tail publishers and bloggers, but will focus on selling this product to comScore 200 publishers dealing with the pain points of adopting header bidding technology.

"Publishers that we've talked to have one to two [header bidding partners] and another four to five that have been knocking down their doors, but can't integrate because of costs to implement, latency and data leakage concerns," Higgins said.

Header bidding adds competition by taking bids before the ad server call, used by partners such as A9, Sonobi and PubMatic. But adding multiple partners takes valuable developer time and requires vigilant oversight to monitor issues like page latency.

The SmartWrapper technology runs one tag in the header of a publisher's page that contains all of the other header bidding partners' tags, simplifying setup and unifying reporting, management and optimization.

Higgins describes SmartWrapper's container as "glue" that helps publishers add partners without causing an earlier partner's tag to break, better manages timeout issues and provides insight into performance.

Topix, a local news site and forum with 13 million monthly uniques, according to comScore, has been testing SmartWrapper for the past few months. It added its first header bidding partner two years ago, and now works with several.

Though the partners added more competition, resulting in a "nice lift," Topix needed a solution to understand the yield of each partner and make sure no one slowed down the site, said company COO Steve Rubenstein. SmartWrapper clarified what was going on, he said.

Under most configurations, it's difficult for publishers to see how often a header partner is bidding and winning. Partners pick and choose what information to share, and the ad server only states who won and at what price, Rubenstein said.

SmartWrapper identifies how often partners bid and how often they win, helping publishers decide which partners are worth the latency they create, or if they should be removed or given a strict response time, Higgins said.

Publishers can limit partners that only bid during the first few page views of a user session on subsequent views so as not to wait on bid responses. Or they can tell partners how much to raise CPMs to increase their win rate.

SmartWrapper can also help publishers like Topix understand how long to wait for bids to come in. "If we know that 95% of the bids are in by one second, there's no need to wait another second," Rubenstein said. "We've cut down on load time for the partners."

Going forward, SmartWrapper will have more "smart optimization" capabilities and

analytics that enable publishers to manage partners and improve yield. An API to allow publishers to pull analytics into their own custom reporting interfaces will be ready next week.

SmartWrapper is one piece of a larger publisher tech platform Technorati is building, which will be dubbed Contango. The platform helps publishers with partner integration, management and optimization. But it will be a neutral third-party technology that doesn't favor one demand source.

Despite many ad tech companies' claims to work better when they get everything, the reality is that more competition generally gets better results for publishers.

"We have not had great success relying on one partner for everything," said Topix's Rubenstein. "We like a healthy ecosystem, and transparency to understand for what's going on."

The healthy ecosystem comes from multiple header bidding partners, and the transparency comes from adding in the SmartWrapper solution.

"We see ourselves as an extended tool to better manage [publishers'] DFP installation," Higgins said. "Google does not benefit when [a header bidding partner like] Sonobi wins, they benefit when AdX wins, so they're not going to build out the extra features that would make it more efficient for publishers.

"We figured we could solve for that, and give publishers additional insights and data."

Lindsay Huggins Leykin | Strategic Partner Lead | lhug@google.com | [646-786-8416](tel:646-786-8416)

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Assaf Grabinsky | Data & Insights Consultant | PBS EMEA

Our team is hiring!

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-- Jonathan Bellack / jbellack@google.com
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